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VEGETABLE PLANTING GUIDE

FOR

WESTERN NORTH CAROLINA

Growing Tomatoes on Mountain Farm

NORTH CAROLINA
STATE COLLEGE OF AGRICULTURE AND ENGINEERING
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CULTURAL DIRECTIONS

The Soil:

The ideal truck soil is a mellow, well-drained loam, which does n form a hard crust after a rain.

Preparation of the Soil:

Careful preparation of the soil is necessary to produce vegetables high quality. Deep plowing and the application of plenty of humus the form of stable manure or green manure crops will do much to ke the soil in good physical condition.

Fertilizers:

Well-rotted stable manure is the best fertilizer for vegetable cro Where this is not obtainable, heavy applications of a commercial fer lizer analyzing 8 per cent phosphoric acid, 4 to 5 per cent nitrogen, a 4 to 5 per cent potash, should be made. It must be kept in mind th leafy crops require large amounts of nitrogen and root crops requi plenty of potash. If commercial fertilizers are used alone, it will necessary to plow under green crops to furnish the required humus.

Sowing the Seed:

It pays to use the best seed available. But even good seed will f if they are carelessly and hastily sown. The seed-bed should be careful prepared, the seed sown at the proper depth for the size of the seed, a the soil firmed after covering the seed.

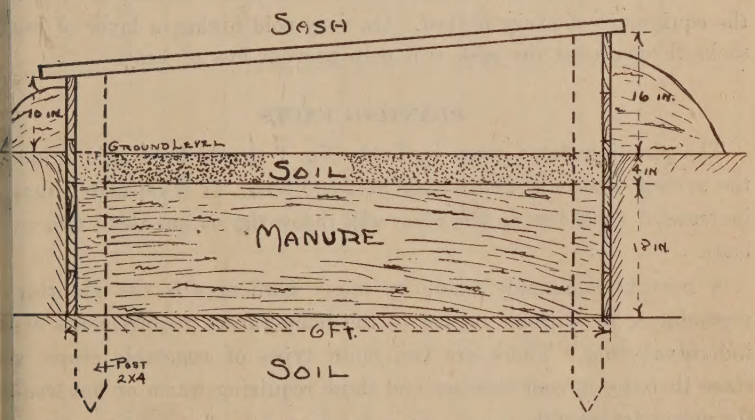
This publication has been prepared to supply information to truck growers and gardeners in Western North Carolina. The material has been presented as concisely as possible by the use of tables and charts showing varieties, planting dates, maturity, and amounts of seed used. Directions are also given for hotbed construction.

ltivation:

Cultivation should be frequent enough to keep down weeds and to ak up any crust that forms on the surface. Cultivation should be p when the plants are young, becoming shallow as the plants grow er.

THE HOTBED

The hotbed is an asset to any gardener, and a necessity for the market dener or truck grower. There are many different types of hotbeds, a popular and inexpensive one is the pit manure hotbed with a oden frame, as shown in the cross-section illustrated below. Standard bed sash are 3 feet wide and 6 feet long, so it is necessary to build the me 6 feet wide and as long as required in multiples of 3 feet.



CROSS SECTION SHOWING METHOD OF CONSTRUCTION OF PIT HOTBED

In Western North Carolina the pit should be dug at least 22 inches p to accommodate an 18-inch layer of manure and 4 inches of garden c. A deeper pit with more manure would insure a longer period of t. After the pit is dug, 2"x4" posts are driven firmly into the soil the corners and at intervals of 4 to 6 feet along the sides of the pit. frame of 1-inch boards or 2-inch planks are nailed on the outside of se posts. The frame need not be extended to the bottom of the pit. e pit should extend east and west, and the frame built up 16 inches ve ground-level on the north side and 10 inches high on the south e, as shown in the diagram, giving a slope to the south.

Cross bars are sometimes set every 3 feet across the beds to brace the es of the bed and to form a rest for the edges of the sash.

Permanent hotbed pits may also be built of concrete or brick.

Fresh horse or mule manure containing about one-third straw lit should be used. This must be piled up for a few days until heat begins, then turned once or twice to get uniform heating before plac in the pit. While filling the pit the manure should be well trampled a packed. On top of the manure is placed 4 inches of good garden s The sash are then placed on the bed and the temperature allowed to r for a few days. After it reaches a high degree, the temperature w begin to fall; when it has fallen to about 90 degrees F., the bed can planted.

The beds should only be watered when needed, and only on brig days, if possible. Ventilation is necessary to keep down the temperatu and excessive moisture. A good soil thermometer should be a part the equipment of every hotbed. On very cold nights, a layer of burl sacks thrown over the sash will help prevent loss of heat.

PLANTING FACTS

The planting dates given in Table No. 1 should be a safe guide f the average season at an altitude of 2,500 feet. It is estimated that increase of 1,000 feet in elevation will throw the season about two wee later.

A mistake commonly made by many gardeners is the planting vegetable seeds without regard to the temperature requirements of t individual crop. There are two main types of vegetable crops, viz those thriving in cool weather and those requiring warm or hot weath for successful growth.

The cool season crops include beets, carrots, kale, lettuce, mustar peas, parsnips, radish, spinach, onions, turnips, cabbage, cauliflower, ar Irish potatoes. Most of these crops may be planted while the soil still cold and before danger of frost is past.

The warm season crops include beans, corn, cucumbers, melons, eg plant, pepper, squash, pumpkin, tomatoes, and sweet potatoes. The crops are tender, easily killed by frost, and should not be planted unt the ground is beginning to warm up. Crops such as egg plant, peppe tomato, and sweet potato should be started in the hotbed and tran planted to the field as soon as weather conditions are favorable.

Kind	Variety	Earliest Planting Date	Latest Planting Date	Sowing Seed for Transplanting to Field	Number Days to Mature
Beans, Snap	Early Red Valentine Stringless Green Pod	April 20–25	Aug. 10–15		50
Beans, Lima	Fordhook Bush Wilson	May 1–10	July 1		80
Beets	Detroit Dark Red Crosby's Egyptian	Mar. 20	July 20		60–70
Cabbage (early)	Jersey Wakefield Copenhagen Market	Mar. 1		Feb. 1 in cold frame or hotbed	90
Cabbage (mid-season)	Copenhagen Market Flat Dutch	May 20		Sow seed April 25	90
Cabbage (late)	Danish Ball Head	July 1		June 1–10; seed in hill June 15–20	90
Carrots	Chantenay Danvers Half-long	Mar. 20	July 20		70–90
Cauliflower	Early Snowball	Mar. 1–15	July 1	Feb. 1–15, early; June 1, late	100
Celery	Golden Self-Blanching White Plume	July 1	Aug. 1	May 1 to June 1	70–90
Corn	Golden Bantam Trucker's Favorite Stowell's Evergreen Country Gentleman	April 15 to May 1	July 1–12		90–100

Cucumber	Evergreen White Spine	April 20	July 15	Mar. 10–15	60–70
Egg Plant	Black Beauty	May 1	July 15	Mar. 15	100–120
Kale	Dwarf Scotch Curled	Feb. 20 to Mar. 1	September		90
Lettuce (head)	New York (also called California Iceberg)	Mar. 15–25 in mountains; Feb. 1 in Polk County and foothills of mountains	Aug. 15 to Sept. 1 for fall crop	Feb. 1 early, July 1 late, mountain counties; in Polk and others at foothills of mountains, Nov. 1. In cold frame	60–70
Lettuce (leaf)	Black-Seeded Simpson Grand Rapids	Mar. 1–15; in fall as early as soil will do	July 10	Feb. 1, July 1, in cold frames or hotbeds	50–60
Mustard (for greens)	Southern Giant Curled Ostrich Plume	Early as soil will do	July 25		70
Okra	Perkins Mammoth Pod	April 25 to May 1	May 10		90
Onions	Yellow Potato Yellow Globe Danvers White Globe	Plant sets Nov. 1, Feb. 20–Mar. 1		Sow seed in February and transplant to field when plants size of lead pencil	60–90
Parsnips	Hollow Crown	Nov. 15	July 1		All season
Peas	Alaska Thomas Laxton	Mar. 1–20	July 20		40–50
Peppers	Ruby King World-Beater	April 20	July 1	Mar. 15	60–90
Potatoes, Irish	Irish Cobbler Rural New Yorker Green Mountain	Mar. 20 to April 15			80–140

Kind	Variety	Earliest Planting Date	Latest Planting Date	Sowing Seed for Transplanting to Field	Number Days to Mature
Potatoes, Sweet	Nancy Hall Porto Rico	May 25		April 1	90–110
Radishes	French Breakfast Scarlet Globe White Icicle	April 15	Sept. 15		40
Salsify	Mammoth Sandwich Island	May 1			120
Spinach (summer)	New Zealand	May 1	July 15		80–90
Spinach (spring and fall)	Bloomsdale Savoy King of Denmark	Feb. 1–15	Sept. 1		60
Squash	White Bush Yellow Summer Crookneck Hubbard (winter)	April 15 to May 1	June 20 to July 15		50–90
Tomatoes	Bonny Best Globe Norton (wilt-resistant)	May 10	June 15	Feb. 1 to Mar. 1	70–100
Turnips	Purple Top White Globe Amber Globe	Spring, Mar. 10; fall, Aug. 15, Nov. 15	Nov. 15		60–80

VEGETABLE PLANTING TABLE, No. 2

Kind	Seed for 100 Feet of Row	Seed for One Acre	Distance Between Rows—Horse Cultivation	Distance Plants in the Row
Beans, Snap	1 pint	1½ bu.	2½ to 3 ft.	3 to 4 in.
Beans, Lima	1 pint	1½ bu.	3 ft.	6 to 10 in.
Beet	2 oz.	6 lbs.	2 to 2½ ft.	3 in.
Cabbage	½ oz.	8 oz.	3 ft.	15 to 18 in.
Canteloupe	½ oz.	2 to 3 lbs.	6 ft.	Hills 4 ft.
Carrot	1 oz.	4 lbs.	2 to 2½ ft.	2 to 3 in.
Cauliflower	½ oz.	8 oz.	3 ft.	15 to 18 in.
Celery	⅛ oz.	4 oz.	3 to 4 ft.	4 to 6 in.
Corn (sweet)	½ pint	10 qts.	3 ft.	30 in.
Cucumber	½ oz.	2 lbs.	5 ft.	15 in.
Egg Plant	⅛ oz.	6 oz.	3 ft.	18 in.
Kale	1 oz.	4 lbs.	2½ to 3 ft.	8 to 12 in.
Lettuce	½ oz.	1 lb.	2 to 2½ ft.	12 in.
Mustard	1 oz.	1½ lbs.	2 ft.	3 in.
Okra	2 oz.	8 lbs.	3 ft.	2 ft.
Onion (seed)	1 oz.	6 lbs.	2 ft.	3 in.
Onion (sets)	1 qt.	3 to 5 bu.	2 ft.	3 in.
Parsnips	½ oz.	5 lbs.	2 to 2½ ft.	3 in.
Peas	1 qt.	1½ bu.	3 ft.	1 in.
Pepper	⅛ oz.	6 oz.	2½ to 3 ft.	18 in.
Potato, Irish		15 bu.	2½ to 3 ft.	15 in.
Potato, Sweet		8 bu.	3 to 3½ ft.	12 in.
Radish	1 oz.	8 lbs.	2 ft.	1 in.
Salsify	2 oz.	8 lbs.	2 ft.	1 in.
Spinach	2 oz.	12 to 15 lbs.	2 ft.	3 to 6 in.
Spinach, New Zealand	1 oz.	5 lbs.	3 ft.	15 to 18 in.
Squash (bush)	1 oz.	2 lbs.	4 ft.	3 to 4 ft.
Tomato	⅛ oz.	4 oz.	4 ft.	2 to 3 ft.
Turnip	1 oz.	1½ lbs.	2 ft.	3 in.
Watermelon	1 oz.	3 lbs.	10 ft.	8 ft.

CARLOT SHIPMENTS

When it is desirable to ship truck in straight carlots, it will be nece sary to grow enough of any one kind of vegetable in one community be able to fill a car. The following table shows approximately the nu ber of acres necessary to insure carlot shipments of important tru crops. These figures will vary somewhat under different cultural co ditions.

Irish potatoes	4 acres
Sweet potatoes	5 acres
Tomatoes (early)	10 acres
Snap beans	10 acres
Cucumbers	5 acres
Peppers	5 acres
Sweet corn	10 acres
Lettuce (head)	3 to 5 acres
Cabbage	3 to 5 acres
Spinach	3 acres
Beets	3 acres
Carrots	3 acres